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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,011	09/18/2006	Dong-Woon Bai	CU-5093 WWP	6979
26530 LADAS & PAF	7590 11/16/200 RRY LLP	9	EXAMINER	
224 SOUTH M SUITE 1600	ICHIGAN AVENUE	AHN, SAM K		
CHICAGO, IL 60604			ART UNIT	PAPER NUMBER
			2611	
			MAIL DATE	DELIVERY MODE
			11/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Comments	10/593,011	BAI ET AL.			
Office Action Summary	Examiner	Art Unit			
	SAM K. AHN	2611			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the co	orrespondence add	ress		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 13 Oc	ctober 2009				
	action is non-final.				
3) Since this application is in condition for allowan		secution as to the i	merits is		
closed in accordance with the practice under <i>E</i>			monto io		
ologica in absordance with the practice ander E	x parte & dayle, 1000 0.5. 11, 40	0 0.0. 210.			
Disposition of Claims					
<ul> <li>4) Claim(s) 1-22 is/are pending in the application.</li> <li>4a) Of the above claim(s) 7-15,21 and 22 is/are withdrawn from consideration.</li> <li>5) Claim(s) 1,5 and 16 is/are allowed.</li> <li>6) Claim(s) is/are rejected.</li> <li>7) Claim(s) 2-4,6 and 17-20 is/are objected to.</li> </ul>					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 18 September 2006 is/a Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Example 11.	re: a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFF	R 1.121(d).		
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National S	stage		
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te			

Application/Control Number: 10/593,011 Page 2

Art Unit: 2611

### **DETAILED ACTION**

### Election/Restrictions

1. Applicant's election without traverse of Group I comprising claims 1-6 and 16-20 in

the reply filed on 10/13/09 is acknowledged.

2. Claims 7-15, 21 and 22 are withdrawn from further consideration pursuant to 37

CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable

generic or linking claim. Election was made without traverse in the reply filed on

10/13/09.

# **Priority**

3. Acknowledgment is made of applicant's claim for foreign priority based on an

application filed in Korea on March 18, 2004. It is noted, however, that applicant has

not filed a certified copy of the 10-2004-0018330 application as required by 35

U.S.C. 119(b).

## Claim Objections

4. Claims 2-4,6 and 17-20 are objected to because of the following informalities:

In claim 2, line 2, the claim recites "M/2+1 PN" wherein without defining "M", it is

unclear what is generated.

In claim 3, line 2, the claim recites "log<sub>2</sub>M" wherein without defining "M", it is unclear

what is included in the data source.

In claim 6, line 3, the claim recites " $log_2M-1$ " wherein it is unclear without defining "M".

In claim 17, line 2, the claim recites "M/2+1 PN" wherein without defining "M", it is unclear what is generated.

In claim 18, line 2, the claim recites "log<sub>2</sub>M-1" wherein without defining "M", it is unclear what is included in the data source.

In claim 19, line 3, the claim recites "log<sub>2</sub>M-1" wherein it is unclear without defining "M".

In claim 20, line 4, the claim recites "log<sub>2</sub>M" wherein without defining "M", it is unclear what is included in the data source.

Claim 4 depends on an objected claim. Appropriate correction is required.

## Allowable Subject Matter

5. Claims 1,5 and 16 are allowed.

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited in the PTO-902 form teach in a similar field of endeavor of a system comprising space time encoder and PN sequence generator.

This application is in condition for allowance except for the following formal matters:

Application/Control Number: 10/593,011 Page 4

Art Unit: 2611

Claim objections.

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sam K. Ahn/ Primary Examiner, Art Unit 2611

11/16/2009